

# CA JOURNAL

DOCUMENT  
U.S. DEPARTMENT  
OF COMMERCE  
SEP 15 1944

Duke University Library

INFORMATION AND STATISTICS SERVICE

## Billion Dollar Airport Building Plan Is Forecast In CAA Report

An airport building program, which foresees more than 6,000 in operation comparatively soon after the coming of peace, takes form in a survey of needs being made by the Civil Aeronautics Administration Planning and Survey Section. The total cost will be slightly more than a billion dollars.

The survey, announcement of which was made by Assistant Secretary of Commerce William A. M. Burden in a nationwide broadcast, is in compliance with a resolution passed by the House of Representatives. A report on the studies, soon to be completed, will go to Congress in accordance with a Congressional directive to the Secretary of Commerce.

Construction forecast in the survey is without precedent in our history both as to kind and extent, and its completion will place the United States foremost in aviation facilities among the nations of the world.

**More Than 3,000 Fields.** The proposed program provides for the construction of more than 3,000 new airports and extensive improvements to 1,625 of the 3,086 now in operation.

Provision is made in a pending House bill for the establishment by the states of agencies to cooperate with the Federal Government by bearing one-half the cost of the projects. The legislation places on the CAA responsibility for the allocating of Federal funds.

**Needs of States Compared.** Mr. Burden, discussing the airport needs of states, takes Massachusetts and Minnesota as examples. On the basis of the number of existing airports, area, population, and number of registered aircraft, the Bay State's number of airports would be increased from 54 to 90 under the CAA plan.

Half the new ports will be of the small size for private flying; 17 would be suitable for local airline operations

and private flying; and one would be large enough for through airline operations. In addition, ten existing fields would be improved. Total construction cost of these would be about \$30,000,000.

Minnesota, whose population is spread over a wider area would, under the CAA proposal, have 159 airports as against its 45 today. Of the total, 142 would be in the smaller airport class and 17 would be in the larger categories. The total cost, including 36 improvement projects, probably would be \$11,700,000.

Mr. Burden said: "The CAA report divides our airport needs into five technical classifications, according to length of runways and other features. But for purposes of simplicity, we may consider that airports fall into two major categories. First, the smaller fields to be used for personal flying and local air service. These fields, beautified by attractive landscaping, will become such an intimate part of the life of the town in which they are situated that I believe they should be called airparks. Second, the larger terminals for airline operations which will become transportation centers in the same way that the railroad station has been the transportation center in the past.

**More Big Terminals Needed.** "While some additional large air terminals will be needed, the Civil Aeronautics Administration emphasizes the importance of the smaller types of landing fields in any future building program. They number about 2,900 out of the total of 3,000 new (See *Airport Plan*, page 99)

## Private Planes Will Be Peacetime Necessity Of Aviation: C. I. Stanton

A lesson from the automotive industry can profitably be applied to the airplane industry Administrator C. I. Stanton of Civil Aeronautics points out in discussing the part it will play in post-war readjustments. He calls attention to the fact that 80 percent of automobile production was cars for private use.

He adds: "I believe we can expect the greatest demand for aircraft to come in the field of personal flying, for pleasure and business."

It follows, the Administrator declares, that the building of many small fields to accommodate private planes will be the big and urgent job which should get underway immediately after peace.

**Small Fields.** In discussing the needs for small fields, Mr. Stanton took into consideration some of the arguments proponents of flight strips advance. He said: "In one sense, flight strips present a definite hazard to air safety. Except in special cases, such as a deep valley where the winds constantly blow up or down the valley, the winds at most places vary in direction at different times. As you probably know, safe landings and take-offs must be made into the wind, so that if a field is to be useable most of the time, it must have two or more runways. This is not possible with a flight strip, which would be a standing temptation to accidents through cross-wind landings, although this type of accident seldom results in serious personal injury.

**Turf Is Satisfactory.** "A good turf is satisfactory for the average small airport. A good turf airport, with runways in two or more directions making it safely useable nearly 100 percent of the time, could be built in most every case for less than the cost of a paved flight strip.

(See *Private Planes*, page 100)

## Turf For Small Airfields Subject Of Special Study; CAA Will Issue Findings

A detailed study is now being made by the CAA Airports Service of airport turf problems. Upon completion the study will supply comprehensive information on how to make turf grow and endure.

Preliminary material which will soon be available from the CAA Washington and regional offices consists of a pamphlet "Turf for Airports," and standard specifications for "Tillage," "Topsoiling," "Seeding," "Sodding," "Sprigging," "Topsoil Planting," "Mulching," and "Notes on Use of Master Turfing Specifications." This material is designed to serve as a general guide in turfing practice.

The importance of the turfing phase of airport building is greatly increased by the growing demand for fields of the smaller type and by the proven economy of turf as against bituminous or cement surfacing. It has been established that a turf cover will range in price from \$50 to \$750 an acre as against hard surface cost of from \$4,000 to \$15,000. The wide variation in costs for turf is dependent on climatic conditions, need for topsoil, type of grass, planting methods and other factors.

Although turf provides the most economical surfacing for traffic areas on small airports, and as a cover to control dust and prevent erosion on larger fields with paved runways, the outlay for a turfing job still represents a substantial sum which may be wasted if the job isn't properly planned and the turf given the right care later.

**Extensive Surveys Made.** Surveys show considerable expenditures have been made in the past for large quantities of topsoil, seed, and fertilizer in providing extensive acreage of airport turf. The results, however, have been neither uniformly satisfactory nor always adequate to meet the demands for which seed and grass have been planted. The CAA attributes these failures partly to conflicting ideas as to what has been needed and the best methods for establishing turf.

**Problem Studied.** In an effort to work out reliable turfing practices, J. R. Yarrow, CAA turf engineer who has been assigned the job of studying the problem, is making field trips to various airports in all sections of the country to inspect and analyze the results of seeding work already done. During the past six months Yarrow has visited 150 airports in some 30 states and obtained the case histories of the turf at each airport.

### Cary Succeeds Reilly

The Civil Aeronautics Board announces the appointment of Charles O. Cary as executive assistant to the Chairman of the Board, replacing J. Francis Reilly who resigned to become Public Utilities Commissioner of the District of Columbia.

## Stovall To Speak Before Aero Medics At St. Louis Session

The sixteenth annual meeting of the Aero Medical Association which opens in St. Louis, September 4, and continues in session through the sixth, will bring together scientists who have made a special study of the human body and its functionings as affected by aviation. The first address of the session will be made by Dr. W. R. Stovall, Chief of Civil Aeronautics Administration Aviation Medical Division.

He will be introduced by Dr. A. J. Herbolsheimer, Chairman, who is Assistant Chief of the CAA Medical Division. Dr. Stovall will speak on "Physical Requirements and the Private Flier." His discussion will be of particular interest at this time when private flying and its inevitable peace time expansion is occupying the attention of almost everyone.

Dr. Stovall will be followed by Dr. Wilbur F. Smith, Chief of CAA Physical Standards Section. He will discuss the "Impressions of a Field Examiner on Entering the Washington Office."

An open forum will be conducted by Dr. Herbolsheimer, following a recess, and the first day's session will close with a motion picture, "Live and Learn," put on by the Pennsylvania-Central Airlines.

The session of Tuesday and Wednesday, September 5 and 6, will be devoted to scientific topics exclusively.

First of these addresses will be by Dr. Malcolm Y. McCormick, CAA Medical Analyst, on "Physical Competency and Performance."

Following Dr. McCormick, Dr. Louis B. Flexner, Technical Aide of the Committee on Aviation Medicine of the National Research Council, who will describe the work of "The National Research Council's Advisory Committee on Civilian Aviation Medicine."

The relation of the medical and legal profession in the field of aviation is to be discussed by Dr. Thomas H. Sutherland, Marion, Ohio, CAA Chief Examiner, and professor of Medical Jurisprudence at Ohio State University, whose topic will be "The Legal Basis of Medical Safety in Aviation."

## Port Officials Discuss

### Postwar Flying Needs

Postwar planning, with special reference to the part airport construction will play, was the chief topic of the sixteenth annual meeting of the American Association of Airport Executives in the Sherman Hotel in Chicago.

Among those who attended were: Charles P. Donaldson, Civil Aeronautics Administration Director of Airports; George W. Burgess, Assistant to William A. M. Burden, Assistant Secretary of Commerce, and J. Kirk Baldwin, Chief of CAA Airport Management Section.

Major Charles E. Hanst, AAF, Dallas, Tex., was elected President of the Association.

Vol. 5 August 15, 1944 No. 8



## CIVIL AERONAUTICS JOURNAL

Jesse H. Jones,  
Secretary of Commerce

Charles I. Stanton,  
Administrator of Civil Aeronautics

Issued on the 15th of each month. Subscription \$0.50 a year. Sold by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Approved by the Bureau of the Budget.

INFORMATION  
AND STATISTICS



The Journal, through its new Question and Answer Column, will be glad to reply to queries from readers. Address them to Editor, Civil Aeronautics Journal, Reference A250, Civil Aeronautics Administration, Washington 25, D. C. Any publication may use the Question and Answer Column, in part or in its entirety. A credit to the Civil Aeronautics Administration will be appreciated.

Q. Is the Civil Aeronautics Journal for free public distribution? D. W.

A. No. The Journal is for sale by the Superintendent of Documents, U. S. Government Printing Office at 50 cents a year. Back copies are 5 cents each. Address your communications to Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Q. How much aluminum tubing is used in constructing a helicopter weighing about 2,500 lbs.? C. B.

A. There is a total of 50 feet of aluminum tubing in a plane of this kind and its weight is 7 lbs.

Q. Will elimination of gasoline for "non-essential flying" ground me and if so for how long? W. P.

A. When plans now under consideration by the CAA become effective private fliers will be able to get sufficient gas to keep their planes airworthy and to insure their flying skill from deterioration.

Q. Can sea level air pressure be maintained inside planes flying at great heights, say 30,000 ft.? W. N.

A. One leading airplane manufacturer answers, "Yes" and says B-29 superfortresses are equipped to provide normal earth-surface pressure.

CIVIL AERONAUTICS JOURNAL

## CAA Aids Establishing Airway Facilities For World-wide War Duty

Radio range equipment and other aviation facilities which did duty along airways in Continental United States are now in war service all the way from Prestwick, Scotland, to the Fiji Islands in the South Pacific and Cairo, Egypt.

Thomas B. Bourne, Director of Federal Airways, discloses the part, little known to the general public, the Civil Aeronautics Administration has played, and is playing in world-wide airway communications. In cooperation with the Seabees, Army Air Force, and Signal Corps, the Administration has had a considerable part in site selection and construction, together with installation of communication facilities and radio equipment in 204 locations outside Continental United States. Seventy of the 204 stations are manned by CAA personnel.

CAA's participation in this world-wide work, dates from October 1942 when stations along an airway from Miami, Fla., to India, by way of South America and Africa were built, and it has been continuous from that time as new areas in need of such service have opened. A map of this war work would show virtually every part of the world.

**Equipment Goes To War.** In many cases, where facilities were needed immediately in foreign locations, the CAA has dismantled stations in the U. S., and shipped equipment thousands of miles to be installed wherever military demands called for it.

Thus a CAA range station at Montpelier, Vt., was dismantled so that radio range transmitters, urgently needed, might be sent to Prestwick, Scotland, while equipment from a dismantled station at Elkins, W. Va., was sent to Cairo, Egypt.

The Dothan, Ala., station provided equipment to install radio ranges at Karachi, India. Work in this case was done by the Corps of Royal Engineers under CAA supervision.

Yoakum, Tex., contributed radio range equipment for Canton Island in the South Pacific, while equipment from Sault Ste. Marie, Mich., was borrowed for the Fiji Islands.

Equipment once operating at Morman Mesa, Nev., is now installed at Salala, Arabia, while Garden City, Kans., contributed radio equipment for a station at Dakar, French West Africa. From Evansville, Ind., equipment was sent to Ascension Island, and at Accra on the Gold Coast of Africa is equipment from Aberdeen, S. D.

**Strategic Airway Built.** Bourne, recounting the dramatic story of how airways communications were set up around the world when war demands made them an immediate necessity, told how the "crimson" airway was constructed from the center of the U. S. to Hudson Bay Country to Iceland, Scotland, Northern Ireland, and Wales between July 1942, and January 1943. Although this airway is not now in use, it early assumed strate-

## Too Flustered to Salute "Ike"

Sgt. James M. Foley, Shenandoah, Pa., formerly with the Audits Section of CAA's Accounts Division and now serving with a military police company at an Eighth AAF Composite Station in England, has the distinction of failing to salute his general and his face glows more than pink when he thinks of that day.

This is the way it happened. General Eisenhower was due at the Station and Sgt. Foley was policing the route. A jeep with three soldiers riding the hood came whizzing along. Sergeant thought the conduct a little too casual

under the circumstances and stopped the jeep. While he was explaining matters to the jeep cowboys General "Ike's" car came along. "And," says Sgt. Foley, "I was so flurried I didn't salute until somebody said: 'In this Army we salute Generals' and I did."



Sgt. Foley

## Form 2780 Now on Sale

Form 2780, the many-page affair on which the domestic airlines make their monthly, quarterly, semi-annual and annual financial and operations reports to the Civil Aeronautics Board, has been placed on sale. It sells for 50 cents a copy and can be obtained by sending that amount in cash or money order to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

gic importance when it became known that the Germans were considering a base in the Hudson Bay Country from which they could bomb industrial U. S.

Airways which have been constructed and are now serving vital wartime traffic include the "lend-lease aerial highway" along which planes are flown to Russia.

**A Pioneering Job.** The "northeast airway" through New England across the North Atlantic was also a CAA engineering responsibility, and was strictly a pioneering job. Facilities were installed at Goose Bay and Cape Harrison, Labrador, Quebec, and Fort Chime.

Wherever the military has requested it, fields have been enlarged, new fields built, and communications systems installed or extended—and sometimes, as in Alaska, the CAA has been ahead of the Army and Navy.

Thus, before the war, when no military policy as to the most dangerous Alaskan frontiers was settled, the CAA went ahead, practically without authority, to build the airport at Cold Bay in the Aleutians, and when Dutch Harbor was attacked had a runway ready for use by bombers.

## Neighbor Nations Send Men To U. S. For CAA Training

The CAA is giving flight, airways, and mechanical training to 147 young men from 11 South and Central American republics this summer.

This is the third Inter-American training program conducted by the CAA. It provides a year's training for 35 pilots at Purdue Aeronautical Corporation, West Lafayette, Ind.; for 66 mechanics at Spartan School of Aeronautics, Tulsa, Okla., and for 46 communications and air traffic-control technicians at the CAA regional headquarters, Kansas City, Mo.

Aircraft communicators and air traffic controllers are being trained for the first time. As the republics to the south install more airway facilities, these CAA-trained men will be ready to operate them. This training, therefore, is one of the first links in a continuous chain of airway facilities down the length of the entire Western Hemisphere. Pilots who now fly the 35,000 miles of airways operated by the CAA in the United States will know that they can expect similar procedures in the other Americas, carried out by English-speaking operators.

All students in the current program, in addition to their aeronautical studies, will receive intensive instruction in English. The University of Kansas City will handle this phase of the program for the airways technicians, while the contracting aeronautical schools will provide it for pilots and mechanics.

Countries represented in the present program are Brazil, Chile, Colombia, Costa Rica, Cuba, Guatemala, Honduras, Mexico, Panama, Peru, and Venezuela.

The first Inter-American program was begun in January 1942, as part of a campaign for eliminating Axis-controlled airlines in Central and South America. Object of the campaign was to replace Axis-controlled services with airlines owned or controlled by Western Hemisphere interests and trained personnel was needed. In this first program the CAA trained 170 pilots, 103 service mechanics, 78 instructor mechanics, and 13 administrative engineers.

## New CAB Alaskan Office

### Will Conduct Hearings

The regional office established by the CAB at Anchorage will function at hearings on all issues arising in that area which previously have been heard by the Washington office. No decisions, however, will be rendered as findings are to go to the central office for action.

This is the first CAB regional office and is headed by Raymond W. Stough, who with Robert J. Bartoo will constitute the CAB Alaskan trial board.

This move will facilitate handling of problems occasioned by the growth of the Alaskan air carriers.



# CAA Flight Analysis Reports

## Are Made Available To Trade

Eleven Flight Engineering Reports which are useful to the aviation industry as "tools of the trade" are made available by the Civil Aeronautics Administration. They will be mailed on request to the CAA Information and Statistics Service, Washington 25, D. C.

These reports originate in two principal ways: compilation of information which comes to the CAA from many sources and as the result of special research and developments by the Flight Engineering Division.

Inasmuch as the production cost of many of these reports is high they will be made available only to those persons who have a professional interest in them. Requests for them come from many foreign countries, aeronautical schools, libraries and the Army and Navy.

Following reports are now available:

**Report No. 1**—"Investigation of the Landing Distance Required by CAR 04.7503 for a Typical Airplane." Presents the results of 38 landings by the Army C-39 airplane conducted by NACA at our request to determine landing distances required by the terms of the transport category for the Douglas DC-3. The series of tests investigated the effect of the amount of power drawn during the approach, the approach speed, and the airplane center of gravity location upon the landing distance and the report contains considerable discussion of the various corrections to the observed data which are necessary to reduce the results to standard conditions.

**Report No. 2**—"Effective Landing Lengths for 106 Airports as Defined by CAR 04.760(g)." Presents in tables, the results of survey of material available in the Civil Aeronautics Administration showing the effective lengths of each runway of each of the airports considered. The purpose of the survey was to determine the effect of the imposition of the transport category operating rules upon the operation of the Douglas DC-3. The report also contains a frequency distribution diagram showing the number of airports having runways lying within various length groups.

**Report No. 3**—"Airplane Climb Performance." Contains a general discussion of the nature of airplane climb performance and presents in complete detail two methods by means of which climb test data may be reduced to standard conditions.

**Report No. 4**—"CAA Equipment for Recording Airplane Take-off and Landing Characteristics." Prepared to serve as a manual of instructions for the use and maintenance of the Bell and Howell special photographic equipment developed by us for the purpose indicated by the title.

**Report No. 5**—"A Proposed Rational Method to Specify the Basic Dimensions of Airports in Terms of the Characteristics of Airplanes to be Operated Safely Therein." It identifies all of the dimensions involved in safety of operation of an airplane at an airport, suggests in terms of speed at which the airplane is to be operated, the maneuvers which

should be accommodated within these dimensions, and establishes formulae by means of which the dimensions required by various airplanes may be calculated. It also considers the effect of wind direction and velocity upon the lengths and angular spacing of runways and contains a list of the characteristics of approximately 100 airplanes which were being produced at the outbreak of the war.

**Report No. 6**—"Investigation of Stalling Characteristics of Douglas DC-3—SC3G Airplane Following the Application of Power." Presents and discusses the results of a series of tests conducted as a result of the Northwest Airlines fatal accident near Fargo, N. D. The investigation was made to demonstrate the possibility of losing altitude at a high rate in spite of the application of full take-off power on both engines.

**Report No. 7**—"Determination of the Take-off Flight Path Defined by CAR 04.7532-T for the DC-3—SIC3G Airplane." Results of a series of tests conducted to determine the effect of the application of the transport category performance requirements to the DC-3. It contains rates of climb with one engine inoperative, the distance required to accelerate during take-off to various speeds, the distance required to decelerate from various speeds assuming engine failure to occur during take-off, and a complete take-off flight path at sea level. The report also contains formulae for reduction of acceleration and deceleration distances to standard conditions.

**Report No. 8**—"CAA Equipment for Recording Airplane Take-off and Landing Characteristics—Using Two Fixed Position Cameras." Report is also a manual for the maintenance and operation of the Eastman Photographic Equipment specially developed by the Technical Development Division of the CAA and used by us primarily for the recording of take-off and landing of flights particularly on and near the water.

**Report No. 9**—"A Study to Determine the Maximum Weights Permitted by the Transport Category Requirements for the Douglas DC-3 Airplane." Report is based upon and is in fact an extension of our Flight Engineering Report No. 7, in that it covers the performance of the airplane over a suitable range of weight and altitude believed great enough to accommodate the values of each actually involved in the operation of the airplane. The report was undertaken to substantiate the recommendation by the Administrator that the regulation be revised to permit the operation of any airplane previously used in scheduled passenger carrying operation at the maximum weight permitted by the performance requirements of the transport category. This report

## Tomorrow's Aviation Discussed

William A. M. Burden, Assistant Secretary of Commerce, over a nationwide hook-up discusses airport survey reports. A billion dollar building program in prospect.

Charles I. Stanton, Administrator of Civil Aeronautics, addresses Regional Conference of Mayors from 11 Western States. Importance of private flying stressed.

Mr. Burden and John E. Sommers, Deputy Administrator of Civil Aeronautics, address Joint Airport Users Conference of the National Aeronautic Association in Washington, D. C. Mr. Burden's topic—"The Role of Airports in the National Economy." Mr. Sommers—"Need for Uniformity in Airport Classification and Nomenclature."

The Journal is unable to print the full text of these speeches. However, copies are obtainable from the CAA Information and Statistics Service, Commerce Building, Washington 25, D. C.

was introduced in evidence at the public hearing by the Civil Aeronautics Board upon this proposed revision to the regulation and became the principal source of factual material involved in that hearing.

**Report No. 10**—"Effect of Airplane Weight Upon Rate of Climb." Derives and presents a comparatively simple equation to calculate the effect of weight upon the rate of climb.

**Report No. 11**—"Airplane Cruising Range Characteristics." This report, has not yet been published, but will be available soon.

**Report No. 12**—"The Effect of Air Temperature Upon the Rate of Climb of an Airplane Equipped with a Constant Speed Propeller." Report presents formulae to calculate the effect of temperature upon the rate of climb. It considers both sea level and altitude rated or "supercharged" engines and both liquid and aircooled installations and applies the equations to a typical example.

**Report No. 13**—"Altitude and Its Effect Upon Airplane Performance." Report is an elementary discussion with particular emphasis upon the nature of the standard atmosphere and of the altimeter. Being prepared and will be available soon.

In addition there are, in preparation or in prospect, reports covering the application of the operating rules of the transport category to a typical airplane and route; a study to determine maximum runway lengths for an airplane designed to comply with the requirements of the transport category; a manual for a new and more elaborate set of photographic equipment recently developed under the supervision of the Technical Development Division.

## Secretary of War Eases Restriction On Aero Charts Sale

Restrictions on the public sale of aeronautical charts have been partially lifted by the Secretary of War. The U. S. Coast and Geodetic Survey is now appointing agents to sell the charts to certificated pilots, approved flying schools, airlines, and others, who prove eligibility to buy them under the new terms.

Charts, which include portions of Vital Defense Areas, may be sold only upon presentation of suitable certification or a written authorization by an official of the Coast and Geodetic Survey or of the Civil Aeronautics Administration. Such approval will be given to: Pilots who have obtained approval of a flight plan into a vital defense area; officers of airlines authorized to operate in such areas; Federal or state officials when use of a chart of such area is required for official business; or persons shown to be loyal to the U. S. and who prove the issuance of the chart is in the public interest.

Aeronautical charts which do not embrace Vital Defense Areas may be sold to the following: Pilots producing their Airmen Identification Cards or suitable identification as a member of the armed forces of the United States—other approval will not be required; flying schools approved by the Civil Aeronautics Administration upon production of evidence of such approved status, providing the charts are of an area adjacent to the school—other approval will not be required; or such persons who present suitable certification or a written authorization by an official of the U. S. Coast and Geodetic Survey or the Civil Aeronautics Administration. Certification or authorization will be granted only when the applicant furnishes proof of his loyalty to the United States and that it is in the public interest that he obtain such a chart.

High schools and pre-flight schools may purchase obsolete charts of locations not embracing Vital Defense Areas upon approval of the local representatives of the Coast and Geodetic Survey or the Civil Aeronautics Administration.

The necessary certification for purchase of the charts may be obtained from Geodetic Regional Supervisors and from CAA Regional Managers.

Coast and Geodetic Survey Regional Supervisors are located at: Boston, Mass., Customs House; New York, New York, 50 Church St.; Norfolk, Va., 1001 Monticello Ave.; New Orleans, La., Customs House; Los Angeles, Calif., Post Office Building; San Francisco, Calif., Customs House; and Seattle, Wash., Insurance Building.

Civil Aeronautics Administration Regional Offices are as follows: Region 1, New York 17, N. Y., 385 Madison Ave.; Region 2, Atlanta 3, Ga., 84 Marietta St., N. W.; Region 3, Chicago 5, Ill., Transportation Building, 608 South Dearborn St.; Region 4, Fort Worth 1, Tex., P. O. Box 1689; Region 5, Kansas City 6, Mo.,

## AIR REGULATIONS ... As of August 1, 1944

TITLE	PART No.	PRICE		DATE LATEST EDITION		NO. AMENDMENTS ISSUED	
		Part	Manual	Part	Manual	Part	Manual
Aircraft							
Airworthiness Certificates.....	01	\$0.05	None	10/15/42	None	2	1
Type and Production Certificates.....	02	.05	None	3/1/41	None		
Airplane Airworthiness.....	04	.15	(1)	11/1/43	2/1/41	1	5
Engine Airworthiness.....	13	.05	None	8/1/41	None		
Propeller Airworthiness.....	14	.05	(1)	7/15/42	12/1/38		
Equipment Airworthiness.....	15	Free	\$0.10	4/15/44	7/1/38		
Radio Equipment Airworthiness.....	16	0.05	Free	2/13/41	2/13/41		1
Maintenance, Repair, and Alteration of Aircraft, Engines, Propellers, Instru- ments .....	18	.05	0.50	9/1/42	6/1/43		
Airmen							
Pilot Certificates.....	20	.10	None	2/15/44	None	2	
Airline Pilot Rating.....	21	.05	None	10/1/42	None	3	
Lighter-than-air Pilot Certificates.....	22	.05	None	10/15/42	None		
Mechanic Certificates.....	24	.05	None	7/1/43	None		
Parachute Technician Certificates.....	25	.05	None	12/15/43	None		
Traffic Control Tower Operator Certi- ficates .....	26	.05	None	2/1/44	None		
Aircraft Dispatcher Certificates.....	27	.05	None	10/1/43	None		
Physical Standards for Airmen.....	29	.05	None	6/1/42	None	1	
Air Carriers							
Air Carrier Operating Certification .....	40	.10	None	11/1/42	None	2	
Air Agencies							
Flying School Rating.....	50	.05	Free	11/1/40	12/40	3	2
Ground Instructor Rating.....	51	.05	None	12/15/43	None		
Repair Station Rating.....	52	.05	Free	10/1/42	2/41		
Mechanic School Rating.....	53	.05	(1)	8/1/42	5/40		
Parachute Loft Certificates and Ratings	54	.05	None	1/21/43	None		
Air Navigation							
Air Traffic Rules.....	60	.10	0.15	11/15/43	8/1/43	6	
Scheduled Air Carrier Rules.....	61	.10	None	2/1/44	None	1	
Foreign Air Carrier Regulations.....	66	.05	None	3/1/42	None		
Miscellaneous							
Definitions .....	98	.05	None	10/15/42	None		
Regulations of the Administrator							
Aircraft Registration Certificates.....	501	Free	None	3/31/43	None		
Recordation of Aircraft Ownership.....	503	Free	None	3/31/43	None		
Seizure of Aircraft.....	531	Free	None	12/8/41	None		

<sup>1</sup> Out of stock.

<sup>2</sup> Special regulation No. 223.

**Note:** Those parts and manuals for which there is a price are obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Remittances must be by cash or by money order, payable to the Superintendent.

### Asks Rules Revision Comment

The Safety Bureau of the CAB has circulated to the aviation industry, pilots and other persons interested, revisions of Part 43 of the Civil Air Regulations for comment. The part consists of non-air carrier operation rules and is the third step taken within the past few months to simplify regulations affecting students, private, and commercial pilots. The Bureau would like to have the comments on or before Sept. 1.

City Hall Building; Region 6, Santa Monica, Calif., 1500 Fourth St.; Region 7, Seattle 14, Wash., P. O. Box 3224; Region 8, Anchorage, Alaska, P. O. Box 440.

Authorized agents will be listed in the Weekly Notice to Airmen and the Civil Aeronautics Journal as they are appointed by the U. S. Coast and Geodetic Survey.

### He Walked Home

Jack Gilpin Shaffer, holder of a student certificate, and his passenger, A. J. Dinger, sustained fatal injuries in an accident near the Lake Providence, La., Airport. After the takeoff Shaffer "dragged" the field and pulled into a steep climb. The plane stalled and fell. A short time before the fatal flight a student pilot had gone up with Shaffer and when Shaffer attempted to execute a maneuver similar to the one causing his and the passenger's death the student took over and cautioned the pilot about reckless flying. He had enough flying for the time being and asked Shaffer to put the plane down which he did successfully.

# DOMESTIC AIR CARRIER STATISTICS

Operations for June 1944

Operator	Routes operated	Revenue miles flown	Revenue passengers carried <sup>1</sup>	Revenue passenger miles flown	Express carried (pounds)	Express pound-miles flown	Passenger seat-miles flown	Revenue passenger load factor (percent)
All American Aviation, Inc.	Pittsburgh-Huntington, Jamestown, Williamsport, Harrisburg, Washington	98,847	0	0	10,777	1,450,014	0	
American Airlines, Inc.	Total	2,782,850	77,789	48,577,973	1,919,031	840,642,627	52,420,959	92.67
	Dallas-Los Angeles	994,019	19,964	17,800,343	142,368	147,010,775	19,115,944	93.59
	New York-Chicago	426,810	19,522	7,245,769	767,491	322,245,248	7,846,921	92.34
	Boston-New York	135,464	13,908	2,444,282	322,752	48,285,520	2,697,214	90.62
	Boston-Cleveland	30,487	2,433	392,023	75,598	14,283,154	622,386	62.99
	Cleveland-Nashville	60,308	5,069	1,181,257	83,614	21,354,170	1,260,330	93.73
	New York-Fort Worth	719,539	21,859	12,292,401	309,271	182,684,622	12,959,317	94.85
	Washington-Chicago	164,147	6,720	2,776,757	157,041	63,596,091	2,986,020	92.99
	Chicago-Fort Worth	114,411	4,910	2,174,639	45,146	27,938,658	2,364,362	91.98
	Buffalo-Toronto	4,104	955	72,580	2,419	183,844	85,500	84.89
	El Paso or Fort Worth-Mexico City	133,561	2,095	2,107,922	13,331	13,040,545	2,482,965	84.90
Braniff Airways, Inc.	Total	402,744	16,980	7,514,074	94,409	40,584,543	8,065,337	93.17
	Chicago-Dallas	233,709	7,993	4,483,260	57,845	31,825,873	4,608,530	97.28
	Denver-Brownsville	160,085	9,625	2,889,742	35,799	8,643,920	3,264,363	88.52
	San Antonio-Laredo	8,950	939	141,072	765	114,750	192,444	73.31
Chicago & Southern Air Lines, Inc.	Total	199,162	8,208	3,780,235	81,977	33,110,320	4,171,022	90.63
	Chicago-New Orleans	167,099	7,451	3,212,952	68,087	27,056,084	3,511,038	91.51
	Memphis-Houston	31,463	1,616	567,283	13,890	6,054,236	659,984	85.95
Continental Air Lines, Inc.	Total	220,420	5,955	2,229,486	15,476	5,733,958	2,556,299	87.22
	Denver-El Paso	156,443	4,179	1,519,773	9,833	3,890,450	1,796,309	84.61
	Pueblo-Tulsa	32,813	1,494	352,681	3,539	793,342	387,233	91.08
	Denver-Kansas City	31,164	764	357,032	2,104	1,050,166	372,757	95.78
Delta Air Corporation	Total	249,128	12,411	4,909,761	73,891	25,734,522	5,205,045	94.33
	Charleston or Savannah-Fort Worth	203,528	9,741	3,988,201	38,648	15,413,951	4,248,965	93.86
	Atlanta-Cincinnati	45,600	2,858	921,560	35,243	10,320,571	956,080	96.39
Eastern Air Lines, Inc.	Total	1,384,908	37,362	20,965,365	340,749	232,561,935	24,064,873	87.12
	New York-San Antonio or Brownsville	479,050	15,586	7,878,460	115,446	66,233,639	9,085,959	86.77
	New York-Miami	632,016	16,168	8,992,018	148,021	128,490,469	10,567,512	85.09
	Chicago-Jacksonville	233,222	7,071	3,359,043	68,899	34,326,142	3,572,223	94.03
	Atlanta-Miami	40,620	879	735,844	8,383	3,511,685	839,179	87.69
Inland Air Lines, Inc.	Total	113,312	2,092	652,169	4,515	811,569	909,140	71.73
	Denver-Great Falls	88,606	2,092	652,169	4,295	755,813	909,140	71.73
	Cheyenne-Huron	24,706	0	0	220	55,756	0	
Mid-Continent Airlines, Inc.	Total	203,487	7,298	2,078,816	18,041	4,033,453	2,563,089	81.11
	Minneapolis-Tulsa	147,700	5,539	1,519,478	15,143	3,190,767	1,855,239	81.90
	Minneapolis-Des Moines-St. Louis or Kansas City	55,787	1,865	559,338	2,898	842,686	707,850	79.02
National Airlines, Inc.	Total	258,406	9,316	3,123,558	35,285	12,942,605	3,593,234	86.93
	Jacksonville-Key West via Miami	130,232	6,259	1,468,680	33,889	3,389,358	1,810,596	81.12
	Jacksonville-New Orleans	128,174	4,497	1,654,869	23,493	9,553,247	1,782,638	92.83
Northeast Airlines, Inc.	Boston-Presque Isle and Moncton	81,198	4,489	1,085,042	9,822	2,265,350	1,631,241	66.39
Northwest Airlines, Inc.	Total	601,618	15,171	10,300,032	178,285	94,168,241	11,581,751	88.93
	Chicago-Twin Cities-Seattle	595,612	15,171	10,300,032	178,280	94,130,346	11,581,751	88.93
	Fargo-Winnipeg	6,006	0	0	265	37,805	0	
Pennsylvania-Central Airlines Corporation	Total	412,937	33,442	7,449,406	376,351	73,917,675	8,599,783	86.62
	Norfolk-Detroit	315,906	28,280	5,891,485	309,326	57,503,652	6,570,404	89.67
	Detroit-Milwaukee or Chicago	26,171	2,884	456,860	30,793	4,934,295	548,674	83.27
	Pittsburgh-Buffalo	13,080	1,202	235,840	8,780	1,263,012	274,680	85.86
	Pittsburgh-Birmingham	57,780	2,509	865,221	27,452	10,216,716	1,206,025	71.74
Transcontinental & Western Air, Inc.	Total	1,926,094	36,299	32,425,293	1,265,195	690,234,711	34,425,062	94.19
	New York-Los Angeles	1,298,200	30,482	22,135,094	722,716	472,816,522	23,429,631	94.47
	Dayton-Chicago	45,355	3,433	780,378	90,137	19,558,752	874,596	89.23
	Boulder City-San Francisco	98,922	4,271	1,900,194	27,177	12,776,343	1,998,912	95.06
	Kansas City-Pittsburgh via Chicago	366,617	10,173	5,556,223	324,298	166,100,536	5,780,438	96.12
	St. Louis-Detroit via Cincinnati and Dayton	66,840	4,917	1,103,543	78,910	13,246,836	1,350,296	81.73
	Washington-Dayton via Columbus	50,160	2,879	951,861	21,957	5,735,722	991,189	96.03
United Air Lines, Inc.	Total	2,485,413	55,031	40,374,869	834,167	627,370,046	41,494,506	97.30
	New York-San Francisco	1,901,787	28,335	28,893,847	675,159	555,909,021	29,530,182	97.85
	Salt Lake City-Seattle	144,037	4,848	2,831,726	38,242	22,547,798	3,037,243	93.23
	Seattle-San Diego	384,629	19,417	7,554,339	102,450	42,513,788	7,792,595	96.94
	Seattle-Vancouver	7,680	1,134	154,873	2,390	124,595	166,822	92.84
	Washington-Toledo	47,280	1,297	940,084	15,926	6,274,844	967,664	97.15
Western Air Lines, Inc.	Total	253,664	10,753	5,032,458	73,062	34,997,749	5,399,045	93.21
	San Diego-Salt Lake City	152,725	6,119	3,180,185	58,562	30,209,934	3,291,430	96.62
	Salt Lake City-Great Falls	30,531	1,312	541,216	1,571	476,745	639,164	84.68
	Great Falls-Lethbridge	9,309	509	69,810	428	52,400	192,494	36.27
	Los Angeles-San Francisco	61,099	3,966	1,241,247	12,501	4,258,670	1,275,957	97.28
Colonial Airlines, Inc.	Total	11,674,188	332,506	190,998,537	5,331,033	2,720,559,318	206,683,386	92.17
Hawaiian Airlines, Ltd.	New York-Montreal	86,250	4,816	1,527,264	16,466	5,015,560	1,745,856	87.48
	Honolulu-Hilo and Port Allen	78,030	9,188	1,295,748	656,059	97,142,615	1,357,152	95.48
Grand Total		11,838,468	346,510	193,321,549	6,003,558	2,822,717,493	209,786,394	92.15

<sup>1</sup> The total passengers carried for each airline is an unduplicated figure with the exception of United, whose unduplicated figure was not available.

NOTE: Correction to May 1944, report (published in July 15 issue of Journal): Continental's revenue miles flown: Total—224,782; Denver-El Paso 156,437; Pueblo-Tulsa 36,882; Denver-Kansas City 31,463. Total for domestic airlines—11,219,214. Grand total—11,371,702. This does not include 702 non-scheduled revenue miles flown by Northeast, which had previously been included in the grand total.

# Operations for the first six months of 1944 as compared with the same period of 1943

Operator	Revenue miles flown January-June		Revenue passengers carried <sup>1</sup> (unduplicated) January-June		Revenue passenger miles flown January-June	
	1944	1943	1944	1943	1944	1943
All American Aviation, Inc.	541,795	498,076	0	0	0	0
American Airlines, Inc.	14,770,437	12,693,266	380,151	375,006	239,125,570	206,955,210
Braniff Airways, Inc.	2,177,399	1,834,597	87,904	68,708	37,457,718	28,752,547
Chicago & Southern Air Lines, Inc.	1,099,344	1,065,074	41,291	38,753	18,836,023	16,391,249
Continental Air Lines, Inc.	994,999	738,316	26,945	21,864	9,237,915	7,031,237
Delta Air Corporation	1,434,313	1,002,062	67,825	47,748	27,076,486	18,593,810
Eastern Air Lines, Inc.	7,421,968	6,477,819	201,663	177,917	114,778,377	103,426,744
Inland Air Lines, Inc.	479,427	387,907	7,723	5,037	2,532,076	1,748,699
Mid-Continent Airlines, Inc.	1,045,426	598,436	32,610	12,322	9,327,649	3,415,844
National Airlines, Inc.	1,436,290	798,740	52,500	27,274	17,178,937	9,609,772
Northeast Airlines, Inc.	470,459	297,146	21,978	13,465	5,256,702	3,328,494
Northwest Airlines, Inc.	2,870,952	1,844,409	65,943	36,916	44,406,468	23,475,878
Pennsylvania-Central Airlines Corporation	1,858,951	1,319,968	143,057	95,893	31,932,392	21,645,739
Transcontinental & Western Air, Inc.	9,181,856	7,604,420	164,090	148,538	141,117,391	106,628,252
United Air Lines, Inc.	13,075,291	10,193,245	261,134	193,857	201,748,365	158,071,767
Western Air Lines, Inc.	1,292,726	909,531	47,902	32,642	22,790,067	13,778,245
Total	66,151,633	48,233,012	1,602,716	1,295,940	922,802,136	722,853,487
Index (1943 = 100)	124.71	100.00	123.67	100.00	127.66	100.00
Colonial Airlines, Inc.	392,722	311,562	21,466	15,669	6,663,278	4,527,781
Hawaiian Airlines, Ltd.	437,493	468,304	50,283	56,118	7,179,185	7,972,115
Grand Total	60,981,848	49,012,878	1,674,465	1,367,727	936,644,599	735,353,383
Index (1943 = 100)	124.42	100.00	122.43	100.00	127.37	100.00

Operator	Express carried (pounds) January-June		Express pound miles flown January-June		Passenger seat miles flown January-June		Revenue passenger load factor (percent) January-June	
	1944	1943	1944	1943	1944	1943	1944	1943
All American Aviation, Inc.	53,399	55,814	7,686,394	7,014,008	0	0		
American Airlines, Inc.	9,708,444	9,310,690	4,541,526,051	4,470,537,315	268,250,889	241,754,749	89.14	71.54
Braniff Airways, Inc.	519,669	629,035	236,382,905	307,350,104	40,853,393	31,918,632	91.69	90.08
Chicago & Southern Air Lines, Inc.	478,799	386,071	192,734,799	172,773,585	22,364,261	20,424,314	84.22	80.25
Continental Air Lines, Inc.	80,353	52,313	33,726,884	16,705,596	11,033,869	8,313,117	83.72	84.58
Delta Air Corporation	435,506	277,640	162,578,492	106,366,028	29,611,849	21,014,914	91.44	88.48
Eastern Air Lines, Inc.	2,240,750	2,163,093	1,488,413,054	1,364,926,478	132,265,400	120,947,042	86.78	85.51
Inland Air Lines, Inc.	13,081	13,858	2,696,889	3,249,950	3,633,316	2,816,381	69.69	62.09
Mid-Continent Airlines, Inc.	100,786	61,066	25,869,624	14,106,479	12,868,402	5,499,159	72.48	62.12
National Airlines, Inc.	221,556	160,283	76,657,847	38,687,432	19,729,382	11,128,177	87.07	86.36
Northeast Airlines, Inc.	55,623	34,511	11,448,082	7,488,043	9,793,688	6,232,313	53.67	53.41
Northwest Airlines, Inc.	952,307	720,439	498,548,569	491,984,625	55,005,120	29,576,537	83.78	79.37
Pennsylvania-Central Airlines Corporation	2,001,623	1,863,333	371,725,189	336,466,745	38,705,329	27,338,873	82.50	79.18
Transcontinental & Western Air, Inc.	5,729,816	4,901,140	2,970,011,211	2,926,141,663	156,452,284	122,678,417	90.20	86.92
United Air Lines, Inc.	4,928,565	4,744,440	3,686,400,612	3,660,177,152	210,790,254	177,071,116	95.71	89.27
Western Air Lines, Inc.	442,740	475,318	228,112,680	206,472,029	26,311,844	16,518,335	86.62	83.41
Total	27,963,017	25,789,044	14,534,519,282	14,130,447,232	1,035,669,280	843,232,076	89.10	85.72
Index (1943 = 100)	108.43	100.00	102.86	100.00	122.82	100.00	103.94	100.00
Colonial Airlines, Inc.	91,442	82,478	27,815,490	22,511,706	8,181,784	6,039,079	81.44	74.97
Hawaiian Airlines, Ltd.	3,448,760	2,753,207	535,509,939	444,289,162	7,652,064	8,563,328	93.81	58.06
Grand Total	31,503,219	28,624,729	15,097,844,711	14,597,248,100	1,051,503,728	857,834,483	89.08	85.72
Index (1943 = 100)	110.06	100.00	103.43	100.00	122.58	100.00	103.92	100.00

	January	February	March	April	May	June	Total
Passengers carried (unduplicated) (total revenue and non-revenue): <sup>1</sup>							
16 domestic airlines	242,683	221,011	251,445	272,273	323,818	339,181	1,650,411
Total airlines	255,001	231,809	262,347	283,899	336,173	353,264	1,722,493
Passenger miles flown (total revenue and non-revenue):							
16 domestic airlines	141,474,106	125,088,611	142,834,165	155,159,351	181,038,023	193,288,705	938,882,961
Total airlines	143,727,253	127,107,076	144,884,424	157,414,978	183,563,374	196,130,812	952,827,917

<sup>1</sup> Preliminary. Due to the delay in reporting by some companies, these figures are subject to revision in subsequent publications.

## To the Editor:

As an attorney interested in aeronautics generally, and aeronautics law in particular, some of the matters in the Journal are of more interest to me than others. I check through the air regulations section and read with care the summaries of official actions and the new regulations. I think the domestic air carriers statistics are most important.

If the Journal would publish summaries of the opinions of the CAB, I think it would be helpful, and an improvement.

O. A. T.

## Little But Important

Loss of a bolt, not thicker and less than half the length of a pencil, caused an accident in which Instructor Norman Albert Medalis sustained serious injury and his student, Vernon Frazier Barnhizer, minor cuts. The clevis bolt was lost in flight near the Ford Lansing Airport, Lansing, Ill., putting the elevator control out of commission.

## To the Editor:

A notice on page 49 of the April Journal says that operations figures for Colonial and Hawaiian airlines are being put in the domestic tables. As a former airline statistician I disagree with calling Colonial, which has a foreign air mail contract, and Hawaiian, which operates outside the U. S., domestic air carriers. That, in effect, is what you have done.

F. P.



# OFFICIAL ACTIONS . . . Civil Aeronautics Board

ORDERS 2951 THROUGH 3019

## Airline Orders

### Service

No. 2952 rescinds a previous order (No. 2121) insofar as it authorized Braniff to temporarily suspend service between Houston and Corpus Christi, Tex. (June 30)

No. 2953 grants the City of Shawnee, Okla. permission to intervene in the proceeding concerning applications of 6 airlines for certificates. (July 1)

No. 2954 consolidates into one proceeding for hearing, applications of Hawaiian Airlines, Ltd., Matson Navigation Co., Northwest, Western Air Lines, UAL, that portion of the application of Ryan School of Aeronautics, Inc. proposing service between Los Angeles, San Francisco, and Honolulu, and the application of Ryan Aeronautical Co. for approval of its wholly owned subsidiary, Ryan School of Aeronautics; permits Pan-Am, Dept. of Justice, Inter-Island Steam Navigation Co., Ltd., and the Ports of Seattle and Tacoma, Wash., to intervene in the proceeding. (July 1)

No. 2956 continues for 60 days, beginning June 27, the temporary exemption granted Alaska Airlines and Cordova Air Service under a previous order (No. 2257). (Issued with an opinion-June 27)

No. 2958 approves agreement between Pan-Am and Lloyd Aereo Boliviano relating to the transportation of domestic Bolivian air mail. (June 28)

No. 2960 dismisses TWA's application for order authorizing temporary suspension of service on routes Nos. 37 and 38. (July 4)

No. 2961 grants cities of Greenville, S. C., Chattanooga, Tenn., Huntsville, Sheffield, and Florence, Ala., permission to intervene in the application of EAL for a certificate-Docket 1278. (July 4)

No. 2962 denies Braniff's motion for consolidation of applications of American and TWA for certificates with its (Braniff's) application. (July 4)

No. 2963 temporarily exempts Ketchikan Air Service from provisions of Sec. 401(a) of the Civil Aeronautics Act so it may engage in air transportation of persons and property between Ketchikan and all points within a radius of 150 miles of Ketchikan Alaska. (July 4)

No. 2964 is a supplemental consolidation order to Board order No. 2844 concerning new applications proposing air service in the West Coast area. (July 4)

No. 2965 rescinds order No. 2895 which authorized Continental to temporarily suspend service on route No. 29 (July 7)

No. 2973 dismisses the application of Boston, Worcester and New York Street Railway Co. for a certificate. (July 8)

No. 2988 dismisses the application of Interstate Transit Lines for a certificate. (July 12)

No. 2994 severs that portion of Panagra's application which seeks authority to operate between the terminal points Chiclayo and Ramon Castilla, Peru, via the intermediate points Chachapoyas, Moyobamba, Yurimaguas, and Iquitos, from docket 1174 and assigns it docket 1496. (July 14)

No. 2996 dismisses applications of Interstate Transit Lines in the matter of the West Coast Case, docket 250 et al. (July 14)

No. 2997 grants TWA permission to serve Palm Springs, Calif., beginning July 15, through the use of the Palm Springs Army Air Base. (July 14)

No. 2998 permits Delta to inaugurate non-stop service beginning July 16 on route No. 24 between Atlanta, Ga., and Jackson, Miss., and between Jackson, and Dallas, Tex. (July 14)

No. 2999 rescinds order No. 1758 insofar as it authorized temporary suspension of service between Spokane, Wash., and Portland, Ore. on route No. 3. (July 14)

No. 3000 fixes the rates of compensation for transportation of mail by Pan-Am over its trans-Atlantic routes. (July 17)

No. 3001 fixes the rates of compensation for transportation of mail over the Alaska Division Routes operated by Pan-Am. (Issued with an opinion-July 17)

No. 3002 is a supplemental order fixing the rates of compensation for transportation of mail over the trans-Pacific routes operated by Pan-Am. (July 17)

No. 3003 revises Board order No. 1913 which fixed the rate of compensation for transportation of mail over the Latin American routes operated by Pan-Am by substituting for "17.83 cents" and "300 pounds" wherever they appear in the order, "13.32 cents" and "266 pounds" respectively. (Issued with an opinion-July 17)

No. 3004 dismisses American's application for a certificate. (July 19)

No. 3005 rescinds order No. 494 which authorized Chicago and Southern to temporarily suspend service to and from Greenwood, Miss. (July 19)

No. 3006 permits Chicago and Southern to serve Greenwood, Miss. through the use of the Municipal Airport, beginning Aug. 1. (July 19)

No. 3007 permits American to serve San Antonio, Tex., through the use of the Municipal Airport (Alamo Field) beginning Aug. 1. (July 19)

No. 3008 dismisses the proceedings, Dockets 662, 663, and 672, re investigations to determine the need for service to and from Laredo, Eagle Pass, and San Antonio, Tex. (July 19)

No. 3009 dismisses applications of Landon Lawson Clevinger in the matter of the West Coast Case. (July 19)

No. 3011 denies Pan-Am's motion that the proceeding concerning applications of Hawaiian Airlines, Matson Navigation Co., Northwest, Western, UAL, Ryan School of Aeronautics, and Ryan Aeronautical Co. be consolidated with the proceedings involving proposed Central Pacific and Australian air routes. (July 19)

No. 3018 withdraws the application of Greyhound Skyways, Inc., Docket 1396, from the West Coast Case proceeding. (July 21)

No. 3019 consolidates 18 applications for certificates or amendments to certificates into one proceeding and assigns them for hearing—Docket 152 et al. (July 21)

## Miscellaneous

No. 2955 denies joint application of Alaska Airlines and Cordova Air Service. It asks for transfer of Cordova's certificate to Alaska and also that Alaska be permitted to purchase certain Cordova assets. (Issued with an opinion-June 27)

No. 2959 reopens the record permitting Northeast to submit additional evidence relating to the purchase price, the proposed acquisition of properties, and the transfer of Mayflower Airlines' certificate to Northeast. (July 4)

No. 2972 denies UAL's motion requesting postponement of the date of hearing, now tentatively set for July 24, until Oct. 16 and denies their request for consolidation of American Export Lines' plan for divesting itself of control of American Export Airlines with the proceeding involving proposed North Atlantic Air Routes. (July 8)

No. 2974 consolidates the applications of Braniff Airways and T. E. Braniff which request approval of the acquisition of control of Aerovias Braniff, S. A., and assigns it for public hearing; grants the petitions of American, EAL, Pan-Am, and UAL for permission to intervene in the proceeding; and denies the motions filed by Braniff Airways, T. E. Braniff, and EAL to dismiss the four airlines' petitions. (July 10)

No. 2989 prescribes amendment No. 1 to Report of Financial and Operating Statistics for International Air Carriers, (CAB Form 2380), by cancelling Schedule 14 and substituting Schedules 14(a) and 14(b). (July 12)

No. 2990 prescribes amendment No. 7 to The Uniform System of Accounts for Domestic Air Carriers (CAB Form 2780 Manual), by cancelling page 31-2 and substituting amended page 31-2. (July 12)

No. 2991 prescribes amendment No. 3 to The Uniform System of Accounts for International Air Carriers, (CAB Form 2380 Manual), by cancelling pages 37-2 and 37-9 and substituting amended pages of the same numbers. (July 12)

No. 2992 terminates the investigation of local, feeder, and pick-up air services instituted by the Board. (July 11)

No. 3010 approves an agreement between Western and Inland Air Lines relating to Western's furnishing facilities to Inland at the Great Falls, Mont. Municipal Airport. (July 19)

## Airman Orders

### Suspensions

No. 2957 advances the effective date of order No. 2950, which suspended the commercial certificate of Pierce P. O'Carroll for 90 days, from July 3 to July 11. (July 3)

No. 2966 suspends Benjamin J. Moeller's student certificate for 60 days because he carried a passenger on a flight from Brown Deer Airport, Milwaukee, Wis. (July 7)

No. 2969 orders that Henry Line, who holds a private certificate, be given a written exam on meteorology as soon as possible. If he does not pass the exam and complete 2 hours of dual instruction by Sept. 4, his certificate will be suspended until he does. Line took the meteorology exam on Feb. 12, 1944 and made a grade of 47. (July 7)

No. 2970 suspends Laurence E. Littrell's student certificate for 6 months. Littrell, while making an emergency landing near Doniphan, Neb., damaged the landing gear of his plane—he then took off even though the aircraft was not in condition for safe operation. Littrell also repaired the landing gear, although he held no mechanic certificate, and committed other violations of the Civil Air Regulations. (July 7)

No. 2971 amends No. 2951, dated June 26, which suspended Don F. Swanson's mechanics certificate for 60 days beginning July 4. Swanson endorsed overhaul of an engine later found defective. New order sets July 17 as suspension date permitting Swanson to finish a job on which he was engaged. (July 7)

No. 2975 suspends Thomas W. Smith's student certificate for 60 days because he took off from and landed on an undesignated landing area. He also failed to make a report of an accident and did not hold a valid medical certificate. (July 10)

No. 2976 suspends the air agency certificate of Eno Flying Service until such time as it maintains, in its regular operation, a certificated aircraft and engine mechanic. (July 10)

No. 2979 postpones the effective date of the suspension of Pierce P. O'Carroll's commercial certificate until further order of the Board. (July 11)

No. 2986 suspends the commercial certificate of Horace M. Shough for 30 days because he flew at less than 500 ft. near Zanesfield, Ohio, and committed other violations of the Civil Air Regulations. (July 12)

No. 2995 suspends Ben C. Arquitt's commercial certificate for 4 months because he performed acrobatics in the vicinity of the Municipal Airport, Lima, Ohio, and committed other violations of the Civil Air Regulations. (July 12)

No. 3012 suspends Kenneth K. Noble's student certificate until he meets the physical requirements prescribed for such a certificate in Part 29. (July 19)

No. 3013 suspends Theodore J. Julian's student certificate for 6 months because he flew near Johnson, Kans. at less than 500 feet and committed other violations of the Civil Air Regulations. (July 19)

No. 3014 amends order No. 2860, which suspended Ray D. Johnson's private certificate, by changing the length of suspension from 90 to 60 days and setting the beginning of the effective date as of July 28. (July 19)

No. 3016 amends order No. 2864, which suspended Clarence E. Phillips' commercial certificate for 60 days, by commencing the suspension period "on the date this order is served on Phillips." (July 19)

No. 3017 revokes Robert L. Montgomery's student certificate for 60 days because he failed to keep an accurate record of his flying time and committed other violations of the Civil Air Regulations. (July 21)

### Revocations

No. 2967 revokes mechanic certificate of George T. Dickason for certifying an engine as airworthy when it was not. (July 7)



No. 2978 revokes Calvin V. Wagner's student certificate because he carried a passenger. (July 10)

No. 2980 revokes Margaret J. Podmore's student certificate because she carried passengers on two occasions near Spartan School of Aeronautics practice field No. 1, Tulsa, Okla. On these flights the dual controls were connected. (July 12)

No. 2981 revokes the air agency certificate held by Ben C. Arquitt, doing business as the Lima School of Aeronautics, because he permitted repair, maintenance, and overhaul work to be performed on aircraft by a person who did not hold an appropriate mechanic certificate and also committed other violations of the Civil Air Regulations. (July 12)

No. 2982 revokes Paul H. Covert's student certificate because he flew less than 1,000 ft. over the City of Rosston, Okla., carried a passenger, and had not, within the preceding 12 months, passed a physical exam. (July 12)

No. 2983 revokes the student certificate of Frank Wood because he landed on an undesigned landing area in the vicinity of Goldsmith, Tex. He also failed to make an immediate report of an accident which occurred during takeoff from the area and which caused damage to his aircraft and injuries to himself and his passenger. (July 12)

No. 2987 revokes the parachute technician certificate of John J. Pollinger because he packed and certified a chute as airworthy when it was not and committed other violations of the Civil Air Regulations. (July 10)

No. 2993 revokes the student certificate of Anthony J. Moreira because he made false entries in his logbook. (July 12)

No. 2995 revokes Ben C. Arquitt's flight instructor rating because, while giving dual instruction to a student, he took over the controls and deliberately maneuvered the aircraft so close to a clump of trees that a wing of the plane brushed through the leaves. Arquitt also committed other violations of the Civil Air Regulations. (July 12)

No. 3015 revokes John W. McCain's student certificate because he carried a passenger and committed other violations of the Civil Air Regulations. (July 19)

#### Miscellaneous

No. 2968 orders William M. Murrah be issued a student certificate if he meets qualifications except the one requiring ability to hear the whispered voice at three feet. (July 7)

No. 2977 reopens case concerning the Administrator's refusal to issue a commercial certificate to Phillips H. Nevin. (July 10)

No. 2984 dismisses the Administrator's amended complaint against the Utica Aviation School. (July 12)

No. 2985 dismisses the Administrator's amended complaint against Albert Panella who holds a mechanic certificate and is also the vice-president, treasurer, and manager of the Utica Aviation School. (July 12)

#### Regulations

##### REG. 312 .....Effective July 1, 1944

Any first pilot listed in Braniff Airways, Inc. air carrier operating certificate on July 1, 1944, as qualified to operate aircraft in scheduled air transportation between Dallas and Houston, Texas, and between Dallas and Corpus Christi, Texas, via San Antonio, Texas, and who was listed in Braniff Airways, Inc. air carrier operating certificate on January 20, 1943, as qualified to operate aircraft between Dallas and Corpus Christi via Houston will be deemed competent to pilot aircraft in scheduled air transportation between Houston and Corpus Christi upon completion of two one-way trips accompanied by a company check pilot.

##### REG. 313 .....Effective July 1, 1944

AMENDMENT No. 1 OF SECTION 241.1 OF THE ECONOMIC REGULATIONS—APPLICATION FOR FOREIGN AIR CARRIER PERMITS (GRANDFATHER CLAUSE)

Section 241.1 of the Economic Regulations is hereby amended in its entirety to read as follows:

SECTION 241.1 OF THE ECONOMIC REGULATIONS—APPLICATION FOR FOREIGN AIR CARRIER PERMITS

(a) *Formal Requirements of Applications.* Applications for permits to engage in foreign air transportation under the terms of section 402 of the Act (hereinafter called foreign air carrier permits) shall meet the requirements set forth in section 285.3 of the Economic Regulations as to execution, number of copies, formal specifications of papers and verifications. Such verifications shall be subscribed and sworn to before a notary public or other officer authorized to administer oaths in the jurisdiction in which such application is executed. Notwithstanding the laws of the country of applicant's citizenship, an application verified before a United States consular officer will be deemed to have met the requirements of this paragraph. All pages of an application shall be consecutively numbered, and the application shall clearly describe and identify each exhibit by a separate number or symbol. All exhibits shall be deemed to constitute a part of the application to which they are attached.

(b) *Filing and Service.* Applications for foreign air carrier permits shall be forwarded to the Board, through diplomatic channels, by the government of the applicant's country of citizenship, and shall be deemed to have been filed on the date such applications are actually received by the Board. Each applicant shall furnish such additional copies of its application and shall make such service thereof upon such other persons as the Board may at any time require.

(c) *Amendments to Applications.* Any information which the Board may request of an applicant subsequent to receiving its application, or any information which the applicant deems appropriate to submit thereafter, shall be furnished in the form of an amendment to the original application. All amendments to applications shall be consecutively numbered and shall comply with the requirements of this regulation as to form, number of copies, verification and in all other essential respects.

(d) *Incorporation by Reference.* In general it is desirable that incorporation by reference shall be avoided. However, where two or more applications are filed by a single carrier, lengthy exhibits or other documents attached to one may be incorporated in the others by reference if that procedure will substantially reduce the cost to the applicant.

(e) *General Provisions Governing Contents.* The statements contained in an application shall be restricted to significant and relevant facts. They shall be free from argumentation or from expressions of opinion, except as such may be required by this regulation. Each application shall give full and adequate information with respect to each of the items set forth in this paragraph. The application may contain such other information and data as the applicant shall deem necessary or appropriate in order to acquaint the Board fully with the particular circumstances of its case. Among other things, every such application shall contain the following information:

- (1) The full name and address of the applicant, the nature of its organization (individual, partnership, corporation, etc.) and, if other than an individual, the name of the country under the laws of which it is organized and the statutory citation of such laws, if any. The citizenship of the applicant should be shown, as well as the percentage of direct and indirect beneficial and non-beneficial interest in applicant held by each government and aggregate of nationals of each government, other than the government of applicant's citizenship. If the applicant is governmentally owned or controlled in whole or in part, the extent of such governmental ownership or control should be shown.
- (2) The name and official address of the competent air authority of applicant's country of citizenship having regulatory jurisdiction over applicant.
- (3) An identification of the route or routes to be covered by the permit for which application is made, specifying the type or types of service (mail, passenger and property) to be rendered on each such route, and whether or not such services are to be rendered in scheduled operations. The identification of each route shall name every terminal and intermediate point to be served by applicant in

connection with the service for which a permit is sought.

- (4) A map (which may be attached as an exhibit) drawn approximately to scale, showing all terminal and intermediate points, both in the United States and in all foreign countries to be served by applicant in connection with the service for which the permit is sought, giving the approximate air mileage between all adjacent points, and principal overall distances.

- (5) If the application is made pursuant to section 402(c) of the Act, it shall state that a permit for the services applied for was issued by the Secretary of Commerce under section 6 of the Air Commerce Act of 1926, as amended, giving the date of such issuance, and that such permit was in effect on May 14, 1938.

##### REG. 314 .....Effective Aug. 15, 1944

AMENDMENT No. 3 OF SECTION 292.2 OF THE ECONOMIC REGULATIONS—ALASKAN AIR CARRIERS.

(a) *Addition of new paragraphs.* Section 292.2 of the Economic Regulations is hereby amended by adding thereto the following additional paragraphs:

"(e) *Place of filing.* Notwithstanding the requirements of any other regulation, order, or rule of the Board, all documents authorized or required by the Civil Aeronautics Act, or any regulation, order, or rule of the Board issued thereunder, to be filed with the Board by any Alaskan air carrier or in connection with air transportation performed or sought to be performed by such carrier shall be filed with the Alaska Office of the Board. The date of filing with the Alaska Office shall constitute the date of filing with the Board.

"(f) *Duplicate originals required.* In addition to the number of copies of each document required to be filed by the regulation, order, or rule under which it is filed one additional signed copy shall be filed, and if the regulation, order, or rule under which it is filed requires verification of documents filed thereunder, said additional signed copy shall also be verified. Two signed copies will constitute duplicate originals; one duplicate original will be transmitted to the offices of the Board in Washington, D. C., by the Alaska Office, and the other will be retained in the files of the Alaska Office.

"(g) *Conformity to rules.* All such documents shall in all other respects conform to the requirements of the regulation, order, or rule of the Board under which they are filed. Upon written application, stating good and sufficient reason therefor, the Director of the Alaska Office may issue a written waiver of any such requirement if he finds that such waiver will not interfere with the work of the Board and will relieve the applicant from any unnecessary burden. He may at any time require any person filing such documents to file additional copies thereof, and to make service upon persons other than those specified in the pertinent regulation, order, or rule of the Board, if he finds such requirement is necessary in the public interest or in the interest of efficiency and expedition in the work of the Board.

And if he is of the opinion that a formal or informal application, complaint or petition does not sufficiently set forth the material required to be set forth by any applicable regulation, order or rule of the Board, or is otherwise insufficient, he may advise the party filing the same of the deficiency and require that any additional information be supplied by amendment. And in case he deems an answer to formal complaints and petitions desirable, he may so notify the parties.

"(h) *Posting and publicity of documents.* The Alaska Office copy of all documents (See Regulations, page 100)

## Burden And Sommers Discuss Airport Needs Before Users At NAA Meeting

CAA airport plans are now going forward aided by an exchange of opinion with airport users, called together in Washington by the National Aeronautic Association July 24-25.

Aiming to bring about "a common agreement on the fundamental requirements of airport development," the conference heard Assistant Secretary of Commerce William A. M. Burden outline the role of airports in the national economy, and CAA Deputy Administrator John E. Sommers speak on the need for uniformity in airport nomenclature and classification.

Mr. Burden said in part: "There is no question that a full realization of the fundamental importance of the airport has come to everyone connected with civil aviation and is rapidly coming to the average citizen.

"All of us who are met here are anxious to aid in the development of a national system of landing facilities which will, at a reasonable cost to our citizens, meet the future needs of the United States in the fullest sense. But to have a goal is one thing, to achieve it is something else.

"Our goal will require the hardest kind of cooperative work to attain, and we must not handicap ourselves by unnecessary obstacles. Like the farmer, we must clear away the brushwood and tree stumps before we begin to plow.

"The landing facilities in the United States are in my opinion to have a more profound effect on our national development—social and economic—than any other form of public works in our history. Our landing facilities, if properly planned and constructed, will perform five primary functions of great importance to the future of the United States.

"First, it will make possible the rapid and healthy growth of air transportation and private flying. Second, by helping to create these new industries it will strengthen our national economy. Third, it will contribute importantly to our national defense. Fourth, it will profoundly affect the life of our citizens for the better—possibly to an even greater extent than our highway system has done. Fifth, for the above four reasons and many others, it will provide the soundest possible kind of public works program."

Regarding airports Mr. Burden said: "There is every justification for airport construction, particularly since the cost per unit is so much lower than in the case of transport airports. The private owner constitutes the only mass market available to the aircraft industry and the possibilities of expansion in this direction offer a real challenge."

Mr. Sommers said: "I wish we had reached the point in our airport development where our chief problem was what to call the different kinds of fields. Unfortunately many communities aren't in the least worried about airport terminology, because they have no airport at all.

"Too many localities think of their aviation future only in terms of airline operations. They see giant planes taking off from their town's airport for San Francisco, Suva and Singapore, and they are planning airports to take care of this type of flying."

He then pointed the need for a more definitely descriptive term for small airports saying: "The word airport was originally advanced by Robert Hinckley and has lately been promoted by the Personal Aircraft Council of the Aeronautical Chamber of Commerce to describe small airports for personal flying. The CAA has conferred with the Council on the problem of terminology and has agreed to use the word airpark in referring to Class 1 airfields, those with unpaved runways less than 2,500 feet long.

"We believe that it would increase rather than reduce confusion to introduce any additional new terms, and we therefore suggest that landing areas be referred to either as airparks in the case of the smallest classification, used for private flying only, or as airports in the case of all the larger fields used for scheduled air transportation of any sort."

### Reflects Lights for

#### Snow-harried Fliers

Experiments with plastic supports for reflectors which will keep airport runway lights in operation even when they are obscured from direct vision by deep snow have been conducted by the Civil Aeronautics Administration Technical Development Division. Considerable data were collected during the winter at the Laconia (N. H.) Airport.

The supports are attached to the base of the runway lights and the prismatic reflectors carry the beams from the bulb in both directions, lighting the pathway of incoming or leaving planes. The development will be especially welcome to fliers operating in northern United States and Canada where heavy snowfalls are packed deep on runways obscuring direct rays from the bulbs.

### Uthus To Supervise CAA's

#### Inter-nation Air Training

Bruce Uthus, Director of Manpower Training, is given general supervision of the Inter-American aviation training program by Administrator Stanton of the Civil Aeronautics.

He will have general direction of any instruction courses to be given by CAA to other Nationals who may be sent to the United States for specialist training.

## War Pilot Accidents In Civilian Aviation Brings Action By CAA

Accidents to returned military pilots flying civilian planes with which they are unfamiliar has resulted in action by the CAA to render this kind of flying less hazardous.

The CAA has also made regulations for certificating returned fighter pilots who apply for civilian jobs flying passengers, requiring them first to prove complete adequacy for the type of flying involved.

Regulations covering the situation were adopted some time ago, but CAA officials have recently listened to many reports and much discussion from the aviation industry, indicating the "conversion" of the military pilots, whether they are on leave, discharged, or facing an eventual return to civilian life, will require careful handling.

**Need For Regulations.** The flying public in its relation to returned air heroes and aces produces a problem which the CAA regards as one requiring education. Private plane owners, eager to welcome back the hometown fighter pilot, urge him to fly their planes, and the pilot, eager to fly, obliges, regardless of his ability to handle the slower and lower-powered civilian plane. Enough unfortunate accidents resulting from this combination have been reported to warrant an appeal to the public to observe certain regulations already established by the CAA to govern the case.

If a pilot has not flown the type of plane concerned within the space of three months, regulations require that he make five takeoffs and landings before taking up a passenger. If he has not had solo experience within the past six months, he is required to take a check flight with an instructor. Observance of these regulations, officials believe, would prevent many accidents.

**Public Has Responsibility.** The public has a responsibility in this sort of flying which is just as important as that of the commercial operator, CAA officials point out. The operator can refuse to rent a plane to anyone who does not comply with the requirements. Too often, the private owner, proud to have an ace fly his plane, embarrasses the returned pilot by urging him to take the controls, and without any previous familiarization.

Concern of the industry that returned fighter pilots might step into cockpits of commercial planes and start flying passengers on the strength of their war records is met by strict regulations of the Civil Air Regulations under Section 20.129, headed "Military Competence." This requires that the pilot prove that his military pilot rating is at least equivalent to the type and grade of pilot certificate sought; that he pass a written examination on the Civil Air Regulations; and that he prove he has been honorably discharged and submit a certificate from (See War Pilot, page 99)

# CAB Reports Show War Pilots Need Schooling For Peacetime Aviation

The obvious fact, repeatedly shown in CAB reports, that combat flying and civilian aviation require two kinds of technique has caused the CAA to take remedial action. The method is discussed in another column of the Journal.

Accidents involving fliers trained for military service are mentioned simply as pointing the need of training war pilots for civilian flying. The cases mentioned are typical.

In one crash near Bogalusa, La., an Army pilot and his companion, an 18-year-old boy, were killed. Dual controls were operating at the time of the accident, and it was impossible to determine who was actually flying the plane at the time.

**Army Bomber Hits Parked Planes.** At Detroit an Army flier driving a bomber overshot the runway and crashed into two parked planes killing one man and seriously injuring another. The first accident was attributed to "reckless flying at a dangerously low altitude," and the other to "poor judgment."

Recklessness was given as the cause of several other accidents, all of which involved civilian pilots, which resulted in the death of six persons, four of whom were boys. In one, a pilot with 3,000 solo hours flew within ten feet of the ground and in attempting to zoom to safety above a building at the Fort Smith, Ark., airport, crashed and he and his passenger were killed.

Near Stamford, Tex., a sixteen-year-old boy who had flown only 16 hours, 4 solo, accompanied by an eighteen-year-old chum, who held a student pilot certificate, crashed after making two successful emergency landings, killing both himself and friend.

The pilot put down first on a marshy field and the passenger got out and walked to harder ground where the pilot put down and picked him up. They were next seen circling and looping for the entertainment of high school friends. Later they circled the home of one of the witnesses at the inquiry, who said the line of flight was lower than the caves. Then the pilot dove at a truck and hit wires crossing the highway. The plane lit on its nose and burned.

**Pranking Boys Killed.** Two other boys were killed pranking near the Mansfield, Tex., airport. The pilot was 17 and his passenger 16. During the flight another boy, 16, from the same airport was overtaken and they began hedge-hopping. Later, the one in the accident, dove at a barn and trying to avoid a tree the plane came down under full power.

Investigators found the accident was caused by recklessness, that the flight was improperly cleared, and that it was without supervision of an instructor.

Another student pilot, with about 50 hours solo time, flying near The Dalles, Oreg., flew too low over a friend's home and hit power wires. He sustained serious injuries.

**Rules Changed.** The serious injury to

an instructor sustained at Owens Field, Columbia, S. C., when hit in the head by the propeller of his machine, caused a revision of field rules to make it mandatory for attendants to accompany each plane when near parking areas.

**Spark Plugs Cause Crash.** Three badly fouled spark plugs and poor judgment was the reason given for an accident at Breedlove Commercial Field No. 2, Lubbock, Tex., in which a WTS apprentice instructor was seriously injured and his student suffered minor injuries.

**Didn't Heed Warning.** Acrobatics, consisting of snap rolls, loops, and Immelmans, resulted in the death of a student pilot in an accident near MacArthur Field, Hollywood, Fla. Although the aircraft was not placarded against acrobatics, the pilot had been warned against such maneuvers as the plane was 11 years old.

**Snow Caused Crash.** A stall at low altitude, "due to crusted snow on the wings of the aircraft" was given as the probable cause of a crash at Krist-Port Airport, Farmington, Mich. A commercial pilot and his passenger were seriously injured.

**Stalls On Climbing Turn.** A student pilot and his passenger were seriously injured when their plane crashed near Curry Airport, Dallas, Tex. The CAB report revealed recklessness, poor judgment and technique resulted in a stall and spin when he attempted a climbing turn at 300 feet.

**Out Of Clouds Into Mountain.** Poor judgment in descending through an overcast without ascertaining exact location was given as the reason for an All American Airlines' plane crashing on a mountainside near Chambersburg, Pa. The pilot held an airline certificate and had accumulated 2,833 hours—1,220 of which were as first pilot for the airline's pick-up service.

## War Pilot

(Continued from page 98)

an appropriate officer proving his experience and competency as a military pilot.

**Must Take Rigid Tests.** Having met these requirements, CAA air carrier inspectors point out, the new pilot still faces more rigid tests to prove his ability to fly passengers commercially. The airlines—and relatively few returned military pilots will be needed by them, even if they multiply their present activities by five times—make their own examinations of applicants, and they require their pilot personnel to study and practice continually; and thus, all airline pilots are always subject to check flights at any time by inspectors of the Air Carrier Division of the CAA.

## Airport Plan

(Continued from page 89)

airfields proposed. It is our belief that if we are to have a thriving aviation industry, it must have its base in the grass roots of our country. That means first of all flying fields located within easy reach of your homes and offices, fields designed for the small private aircraft, which many of you will own or rent. It also means fields a bit larger, but still modest in size, for local commercial air service to and from the thousands of small communities not now accessible by plane.

"At the present time only 286 places in the United States are approved stops on scheduled airlines and of these 1/4 are in need of approved airports for safe and efficient airline service. Air carrier operations are suspended at some of these places because of the unsatisfactory condition of their airports.

"Under the CAA plan there would be 1,827 cities with airports which could accommodate air transport operations. By air transport operations, I mean anything from charter service and small local or feeder lines to transcontinental express service, according to the travel market the area offers.

**Expansion Need Shown.** "The ultimate need for such expansion is evident. There are already on file with the Civil Aeronautics Board in Washington applications to begin service to some 720 new points. Of these 612 are places listed in the Civil Aeronautics Administration plan as requiring airport construction. Scheduled airline service will not, of course, be made available to all these points in the immediate future. Local airline operation is still in the experimental stage and the Civil Aeronautics Board has very properly announced that it will approve only operations which show a justifiable expectation of success at a reasonable cost to the Government. But where the demand for the service is strong enough it will be made available as aviation progresses—first perhaps by charter service and later by scheduled operations.

"The airport construction necessary to bring air transportation to these 1,827 cities in the CAA plan would cost approximately \$630,000,000 and the 1,827 airports would serve some 5,000 towns within easy reach of them.

**Begin Job Now.** "I would like to urge every community in the nation to begin today to examine the part it must play in a national airport program. This is distinctly not a job which can be done by Washington alone. A national perspective is necessary in laying out the overall plan, and in setting standards.

"Every community should have some agency busy studying its airport problem, and prepared to cooperate with State and Federal officials. The mere fact that a Federal aid program is receiving consideration must not result in a halt in airport preparations by towns, cities and states. They should proceed not only with planning, but with acquisition of those sites which have received Federal approval."

# CAA To Recommend 3,050 New Ports

Preliminary studies by the Civil Aeronautics Administration for its report to Congress in accordance with the Lea resolution indicate that 3,050 new airports will be a basic requirement to take care of the Nation's anticipated civil aviation development.

These airports are divided as follows: Class One, 1,809; Class Two, 1,098; Class Three, 101; Class Four, 30; and Class Five, 12. As of July 1 there were 3,255 airports in the United States, many of which will be extensively improved and upon completion of the contemplated building program the total number will be 6,305.

## Private Type Plane Eagerly Sought At CAA Trainer Sales

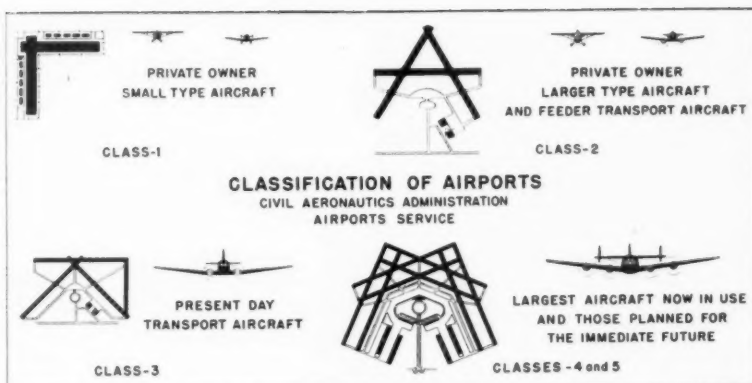
One-half of the 5,400 airplanes costing \$13,350,000 purchased by the Defense Plants Corporation and turned over to the Civil Aeronautics Administration for use by the War Training Service have been sold. Notices of the sealed bid sales, which are conducted by the CAA in the seven Regions where the property to be disposed of is located, went out on February 21 and less than a month later the sales program began.

Of the 2,600 planes already sold more than half went to private purchasers and dealers. Many of these are of the kind used in elementary training and are admirably adapted to private flying. It is obvious many of those bought by dealers will ultimately go to private fliers who, it is believed, will be the most important element in peacetime aviation on a dollars and cents basis.

Sales records further substantiate the importance of the private plane market in that the machines which are adaptable to individual flying brought high prices. Complete records of sales naturally are not now available, but if a single transaction may be taken as a fair sample, the sale of one, Cub type, used in elementary training indicates a strong market for this kind of a machine. The two-place plane, 65 to 100 hp, which cost the DPC \$1,162, sold for \$1,010.

A secondary trainer, also two-place, 145 to 230 hp, which cost \$7,000 was bid in for \$1,090. A larger plane, of the cross-country type, four-place cabin, up to 400 hp, which range in price from \$8,000 to \$14,400 was bid in for \$6,300.

The figures quoted cannot be taken as an average and that cannot be available until all of the 5,400 planes have been disposed of. The sales prices given, however, do furnish an indication of the kind of planes which will be in demand with the coming of peacetime flying.



Class 1: 2 to 5 place; adequate for aircraft up to 4,000 lbs. gross weight; adapted to needs of small communities and auxiliary airports in metropolitan areas; landing strips 1,800 to 2,700 feet in length.

Class 2: up to 20 place; adequate for aircraft up to 15,000 lbs. gross weight; for communities of 5,000 to 25,000 population; runways 2,500 to 3,500 feet in length.

Class 3: up to 30 place; adequate for aircraft up to 50,000 lbs. gross weight; cities of 25,000 to 250,000 population; runways 3,500 to 4,500 feet in length.

Classes 4 and 5: 30 place and larger; adequate for aircraft of more than 50,000 lbs. gross weight; major metropolitan centers and air terminals; Class 4 runways 4,500 to 5,500 feet in length; Class 5 runways 5,500 feet in length and over.

Runway lengths given are for sea level. Higher altitude requires greater runway lengths.

## Regulations

(Continued from page 97)

ments subject to this regulation which are required by the Act, or by the regulations, orders, or rules of the Board thereunder, to be posted in the Office of the Secretary of the Board shall be posted in the Office of the Director of the Alaska Office; and the Alaska Office copy of documents which are required by section 1103 of the Act to be preserved as public records in the custody of the Secretary of the Board, shall be preserved as public records in the custody of the Director of the Alaska Office under such reasonable arrangements as he may make for public inspection thereof. Such posting and preservation as public records shall be in addition to that required of the Secretary of the Board.

"(i) *Docket of Alaska Office.* A complete docket of all formal proceedings by or against Alaskan air carriers, or by or against persons seeking authority to engage in air transportation solely within the Territory of Alaska, shall be maintained in the offices of the Board at Washington, D. C., and in the Board's Alaska Office. Hearings and conferences in such proceedings shall be assigned, and procedural notices (other than notice of oral argument before the Board) and examiners' reports will be served, by the Alaska Office. Subject to the provisions of paragraphs (e), (f) and (g) of this section, all hearings and conferences in such proceedings shall be held in accordance with the Board's rules of practice (Part 285 of the Economic Regulations). Exceptions to the examiner's report in any such proceeding and briefs in support of such exceptions, may be filed with the Board at its offices in Washington, D. C., in which event one copy of such exceptions and briefs shall be sent by air mail to the Director of the Alaska Office by the party so filing; or may be filed, with the Board at its Alaska Office, in which

event they will be transmitted by that Office to the Board's office at Washington, D. C. If any of the parties to any such proceedings so desire, the Director of the Alaska Office may on behalf of the Board hear oral argument upon exceptions to the examiner's report and shall transmit a transcript of such oral argument to the Board. Such oral argument before the Director of the Alaska Office shall be in lieu of oral argument before the Board.

"(j) *Recommendation by Alaska Office concerning regulations.* Unless otherwise specifically directed by the Board, the Director of the Alaska Office may submit drafts of proposed regulations, or of amendments or modifications of regulations, to the Alaskan air carriers for comment. Upon receipt of such comment, he shall transmit them, together with his recommendations, to the Board for consideration. The Board may revise any such proposed regulation, amendment or modification, and, in respect of any substantial revision, may direct the Director of the Alaska Office to submit such revision to the Alaskan air carriers for further comment."

"(k) *Effective date.* This amendment of section 292.2 of the Economic Regulations shall take effect on August 15, 1944; provided, however, that in the event the Director of the Alaska Office certifies to the Board at any time prior to August 15, 1944, that the Board's office in Alaska is not open for business, this amendment shall not take effect until the Board shall so provide by further regulation. Copy of such certification shall be served by the Director of the Alaska Office upon each Alaskan air carrier by registered mail and upon such other persons as the Board may direct.

## Private Planes

(Continued from page 89)

"We in CAA are proud to have assisted in initiating and developing aviation education programs, and stand ready to aid wherever possible in their expansion."



